

36775
8/069/62/012/005/006/014
B101/B108

21.4.26c
AUTHORS: Nikolayev, N. I., Kolotyrkin, V. M., Tunitskiy, N. N.

TITLE: Separation of lithium isotopes on cationites by means of sharp-edged moving bands

PERIODICAL: Atomnaya energiya, v. 12, no. 5, 1962, 404 - 407

TEXT: The application of the method of F. Spedding, I. Powel, H. Swec (J. Amer. Chem. Soc., 77, 6125 (1955)) to separating the lithium isotopes on a KY-2 (KU-2) cationite is described. Since neutralization of the H^+ form of the resin led to a temperature increase and to irreversible adsorption of lithium an NH_4^+ buffer band was used. First, 0.2 N NH_4OH was passed through a column with KU-2 in H^+ form. A 23-cm long NH_4^+ band was observed owing to the change in color of the resin. 0.2 N LiOH formed a 33-cm long visible Li^+ band. The bands were eluted by means of 0.25 N NaOH. The transition of the cationite from the Li^+ to the Na^+ form is not visible (no change in color). For calculating the separation factor & the authors

Card 1/2

44893

S/076/63/037/001/005/029
B108/B126

M. T. 200

AUTHOR:

Nikolayev, N. I. (Moscow)

TITLE:

Solution of the equations for the operation of a counter-flow ion-exchange column for the case of isotope separation

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 1, 1963, 44-51

TEXT: The general equation for the operation of a counter-flow ion-exchange column under steady-state conditions is solved for the case of small coefficients of separation. The column is assumed to be filled with spherical ionite particles (radius R). (1) Internal diffusion exchange kinetics: A constant concentration $N(x,r)$ of the rare isotope in the ionite spheres is assumed to be maintained at one end of the column (x is the coordinate along the column). The considerations are restricted to $N \leq 1$ and $n \leq 1$ (n is the relative concentration of the rare isotope in the solution). The equation is then solved by separation of the variables: $N = X(x)Y(r)$. This leads to a rapidly converging series.

Card 1/3

S/076/63/037/001/005/029
B108/B186

Solution of the equations for ...

Considering only its first term, one obtains $N = N_0 \exp(-\frac{D(1-x)}{v} \beta_n^2 x)$, where β_n are the roots of the characteristic equation (transcendental) of the problem: $\beta^2 = -\frac{15(\alpha-1)}{vR^2}$. Comparing the result with the Fenske equation $N = N_0 \alpha^{(x/RD)}$ and considering that $\ln \alpha \approx \frac{\alpha-1}{\alpha}$ for small α , the height of an equivalent theoretical plate is obtained as $h_D = \frac{vR^2}{15D(1-x)}$

where v is the rate of motion ($\text{cm}^3/\text{cm}^2 \cdot \text{sec}$) of the ionite, D is the diffusion coefficient of the exchanged ions in the ionite, and x is the relative volume occupied by the solution in the ionite layer. (2) External diffusion exchange kinetics: the problem has the solution $n = n_0 \exp(3D_s(1-x)(\alpha-1)x/Rbu)$. Considering that $\alpha-1 \approx \ln \alpha$ for $\alpha \approx 1$, and comparing the solution with the Fenske formula, one obtains $h_b = \frac{Rbu}{3D(1-x)}$

where b is the diffusion layer of the solution, u is the flow rate of the

Card 2/3

S/076/63/037/001/005/029
3108/3186

Solution of the equations for ...

solution, D_s is the diffusion coefficient of the exchanged ions in the solution. These formulas for the HETP agree with experimental data. There are 5 figures.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute imeni L. Ya. Karpov)

SUBMITTED: May 20, 1961

X

Card 3/3

NIKOLAYEV, N.I.; FILIMONOVA, A.M.

Electric conductivity of a strongly basic anion exchanger.
Zhur. fiz. khim. 37 no.11:2451-2454 N°63. (MIRA 17:2)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

ACCESSION NO: A9403360

8/2074/0/033/001/0139/0462

AUTHOR: Sigitina, A. S.; Shishagov, N. I.; Tunitskii, E. E.

TITLE: Ion exchange kinetics in sulfonated cation exchange resins

SOURCE: Vysokomol Molni, v. 33, no. 4, 1991, 439-461

TOPIC WORDS: ion exchange kinetics, cation exchange sulfonates, film diffusion, anomalous diffusion, ion microcomponents, electrcconductivity

ABSTRACT: This is a treatise prompted by the fact that preparation of high quality ion exchange resins and their regeneration is only possible if data about them both in steady as well as kinetic states are known. Ion exchange in steady state is well known, but there is a scarcity of information on ion exchange kinetics. This article consists of the following sections: 1. The fundamentals of ion exchange kinetics theory in which the following aspects are mathematically analyzed: a) diffusion through the solution film adjacent to the ion exchange resin at constant concentration of the outside solution; b) diffusion through the film at variable concentration of the outside solution; c) diffusion in the ion exchange particles at constant concentration of the outside solution; d) diffusion taking place simulta-

Card 12/3

ACCESSION NR: AP4620332

S/0069/64/016/003/0243/0249

AUTHOR: Kalinina, M. D.; Nikolayev, N. I.; Gur'yev, M. V.; Tunitskiy, N. N.

TITLE: Investigating the effect of Co⁶⁰ gamma-radiation on strong-base anionites AB-17 and AM.

SOURCE: Atomnaya energiya, v. 16, no. 3, 1964, 245-249

TOPIC TAGS: anionite, gamma radiation, Co⁶⁰ radiation, radioactive isotope, radiolysis, vacuum desiccator, magnesium, trimethyl amine, gaseous product, exchange group, inert state, calcium chloride, nitric acid, carbonate ion

ABSTRACT: Experiments have been made on the radiation stability of the polymerization type anionites AB-17, containing 8 and 16% divinyl benzene (also referred to as AB-17X6 and AB-17X16), and AM by irradiating them in water with Co⁶⁰. The maximum total irradiation dose amounted to 4.7×10^4 roentgens. Before irradiation the anionite samples were changed into a hydroxyl form by a caustic soda solution and then carefully washed with water. After irradia-

-and 1/2

Good

VARYOLOMEYEV, Ye.K.; BOTOVA, A.S.; NIKOLAEV, N.I.; BOLDYREVA, T.P.;
KAMPUKHINA, T.V.

Demonstration experiment on the subject "Properties of water."
Khim. v shkole 15 no.6:68-70 K-D '60. (MIRA 13:11)

1. Pedagogicheskiy institut, g.Ul'yanovsk.
(Water--Study and teaching)

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001137110017-9

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NIKOLAEV, N.V., inzh.

Mobile milking unit. Trakt. i sel'khozmesh. no. 4:37 Ap '59.
(MIRA 12:5)
(Milking machines)

BASS, G.H.; NIKOLAEV, N.V. (Odessa)

Reducing the cost of purification works in water-supply systems.
Vod. i san. tekhn. no.11:22-24 N '59. (MIRA 13:3)
(Filters and filtration)

SOV-116-58-7-3/20

AUTHOR: Alyab'yev, V.I., Korobov, G.B. and Nikolayev, N.V., Engineers

TITLE: A Cable Crane for the Loading of Lumber by Means of a Trailing Winch (Kabel'-kran na pogruzke lesa pri lebedochnoy trelevke)

PERIODICAL: Mekhanisatsiya trudoyemkikh i tyashchikh rabot, 1958, Nr 7,
pp 10-12 (USSR)

ABSTRACT: At the Krestetskiy lespromkhоз TsNIIIME (the Kresttsy Leepromkhоз of the TsNIIIME) an installation for the trailing and loading of lumber, has been successfully put into operation. The installation consists of a TL-5 winch and a cable crane with a special loading carriage. It is used in wood-cutting areas of 500 x 500 m or less. The loading operations are carried out by the cable crane, consisting of 2 booms and a steel cable (110 m long) between them, along which moves the loading carriage with the hoisting device (capacity - 6 tons or 8 cu m).
Card 1/2

A Cable Crane for the Loading of Lumber by Means of a Trailing Winch

present 12 loading installations with cable cranes are simultaneously operating. Labor efficiency is 30 - 40% higher than when inclined booms were used. The article presents a detailed description of the working procedure. There is 1 figure, 7 technical drawings, and 1 scheme.

1. Cranes--Operation 2. Lumber--Applications

Card 2/2

НПОЛЯМУХА

Practices of the Orekhov Sugar Refinery: 1. Boiling intermediate
masses suit according to the method of pan operator N.E. Sysoeva;
2. Unloading beets from flat cars by means of a tractor-mounted
shovel. Zakh. pres. 30 no. 2:57-58 P '56. (NIZA 9:7)

1. Orekhovskiy zakharchennyj zavod.
(Orekhov--Sugar industry)

NIKOLAEV, N.V.

Modernisation of a beet washer. Sakh.prom. №.8:
45-46 Ag '60. (MIRA 13:8)

1. Oktyabr'skiy sakharinyy zavod.
(Sugar beets)

NIKOLAYEV, N.V.

NIKOLAYEV, N.V., Cand Tech Sci -- (diss) "Restoration of the capacity of river bed hydromillide power stations in floods." Odessa, 1958. 14 pp (Min of Higher Education UkrSSR. Odessa Eng-Construction Inst). 100 copies (KL, 20-58, 98)

BOSTON, MASS., AND VARIOUS PLACES (OCTOBER)

EXCERPTS FROM TELEGRAMS TO THE SECRETARY OF STATE FROM THE
AMBASSY (OCTOBER)

GRISHIN, I.N.; NIKOLAEV, N.Ye.

Effect of combined use of ACTH and cortisone with antibiotics on
the healing of sutured intestinal wounds in experimental diffuse peri-
tonitis. Eksper. khir. i anest. no.1:55-57 '65.

(MIRA 18:11)

1. Kafedra obshchey khirurgii (sov. - prof. T.Ye. Gnilorybov)
Minskogo meditsinskogo instituta.

REF ID: A6141 / FILED BY [unclear] 1986-08-23
FBI - BOSTON / FMD(p) / FDR/ETC

ACCESSION NR AM4046249

BOOK EXPLOITATION

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B-1

Matov, Viktor Ivanovich; Nikolayev, Oleg Aleksandrovich; Fetisov, Aleksandr Valdil'yevich; Zhdanovich, Nikolay Samoilovich

Digital training computer (Uchebnyaya tsifrovaya vy'chislitel'naya machine),
Moscow, Gosenergoizdat, 1963, 127 p. illus., 24,000 copies printed.
Series note: biblioteka po avtomatike, v7'. 8"

TOPIC TAGS: digital computer

PURPOSE AND COVERAGE: The book cites the basic principles of building digital computers, describes the principal and functional circuits of a training digital computer, and describes a computer designed by the authors. The book is intended for a wide audience of workers concerned with problems of digital computer technology and can serve as a text for students studying the design of digital computers.

TABLE OF CONTENTS (abridged):

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Ch. II. Elements of a digital computer -- 22
Ch. III. Basic components of a training digital computer -- 39
Ch. IV. Memory -- 47
Ch. V. Arithmetic components of a training digital computer -- 57
Ch. VI. Control components -- 67
Ch. VII. Input-output equipment -- 89
Ch. VIII. Programming for a training digital computer -- 111
Appendix -- 125

SUB CODE: DP SUBMITTED: 30Aug63 NR REF TOV: 000

OTHER: 000

Card 2/2

SOV 117 52 3 5352

Translation from: Referativnyy zhurnal Metallurgiya, 1959, Nr 3, p 62 (USSR)

AUTHORS: Tavadze, F. N., Nikolayev, O. B.

TITLE: On the Study of Stresses in Molds (K voprosu izucheniya napryazheniy v izlozhnitsakh)

PERIODICAL: Tr. In-ta metallurgii. AN GruzSSR, 1958, Vol 9, pp 103-105

ABSTRACT: In the open-hearth division of the Zakavkazskiy (Transcaucasian) metallurgical plant an investigation was carried out on the stresses in solid-bottom molds for 6-ton ingots. The mechanical tensometer method with an arrow indicator was used for studying the stresses. A brace 300 mm long with one end connected to the indicator was set on the outer face of the mold 70 mm from the upper end. A second metal brace with a set screw for linking to the indicator was placed in the same horizontal plane with the first brace. After the mold had been filled with liquid steel a recording was made every 30 sec of the overall deformation (OD) which was determined by the sum of the values for the mechanical-expansion deformation (MD) due to the internal heating of the walls of the mold and the deformation resulting from the rise in temperature of the outer surface of the mold (TD). The TD

Card 1/2

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TAVADZE, P.N.; MINDLATEV, O.B.; KABICHVRISHVILI, N.A.; TSURKAVA, G.A.

Increasing the durability of molds by means of cast steel
bands. Trudy Inst.met. Akad.Grus.SSR 9:107-116 '58.
(MIRA 12:8)

(Molding (Foundry))

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001137110017-9"

TSYANKOV, P.S. [TSyankov, P.S.]; NIKOLAYEV, O.P. [Nikolaiev, O.P.]

Effective utilization of the fusel oil column of rectification
and beer rectification apparatus. Khar.prom. no.1:48-51
Ja-Mr '62. (MIRA 15:8)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Distillation apparatus)

REF ID: A62 ENTR1/EPALg-2207(2)ENR(1) ENR(1) PG-2, PI-4 IAP(c)
ACCESSION NR: AP5018315 UR/0067/05/035/007/1319/1320
535.378
AUTHOR: Myazdrikov, O. A.; Nikolayev, O. S.; Pustoshkin, B. K.; Trefilov, V. M.
TITLE: Experimental investigation of mechanical excitation of phosphor suspen-
sions in solid dielectrics
SOURCE: Zhurnal tekhnikeskoy fiziki, v. 35, no. 7, 1965, 1319-1320
TOPIC CODES: triboluminescence, luminescent material, mechanical stress, zinc
sulfide

ABSTRACT: The authors have dropped steel balls onto the back side of electro-
luminescent panels and observed the resulting flashes with a photomultiplier.
The flashes were approximately exponential with a rise time of 10^{-4} sec and a
decay time of 10^{-3} sec. The flash intensity was proportional to the energy of
the ball at impact, the proportionality constant depending on the nature of the
phosphor and the dielectric in which it is suspended, and on the type of photo-
multiplier employed and its operating conditions. Data are presented graphically
for a ZnS phosphor activated with 0.8% Mg and 0.1% Cu and suspended in a SO

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ACCESSION NR: AP5018315

micron thick polystyrene film. It is concluded that an impact energy of 0.2 erg could be detected. Varying the temperature from - 40 to + 50°C did not affect the results. "The authors thank Professor D.N. Bagledov for discussing the results and for advice in planning further investigations." Orig. art. has: 1 formula and 1 figure.

INSTITUTION: Leningradskiy institut aviaticheskogo priborostroyeniya (Leningrad Institute of Aviation Instrumentation)

RECEIVED: 15 Sep 68

PCIC: (S)

SUS COIE: SS, CP

NO PEP COV: 601

OTHERS: (S)

Card 1/2

L11423-67 ENT(1) IJP(c) GL
ACC NR: AF6031274

SOURCE CODE: UR/0037/06/036/008/1703/1705

AUTHOR: Yekimova, N. F.; Myazdrikov, O. A.; Nikolayev, O. S.

ORG: Leningrad Institute of Aviation Instrument Design (Leningradskiy institut aviatcionnogo priborostroyeniya)

TITLE: Mechanical excitation of a suspension of phosphore in a solid dielectric and the theory of impact

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1960, 1703 1709

TOPIC TAGS: triboluminescence, impact stress, elastic deformation, elastic modulus

ABSTRACT: Two of the present authors and collaborators (ZhTF, 35, No 7, 1319-1320, 1965) have previously dropped solid spheres onto a dielectric slab containing suspended phosphorescent material and noted that the intensity of the resulting flash is proportional to the kinetic energy of the sphere at the moment of impact. In the present paper the authors employ the theory of impact expounded by A.N.Dinnik (Izbrannyye trudy AN UkrSSR, Kiyev, 1952) to calculate the duration of impact and the energy expended in compressing the dielectric slab in terms of the elastic moduli of both materials, the radius and density of the sphere, and the velocity of impact. It is suggested that the ratio of the intensity of the flash to the energy expended in compressing the dielectric slab will provide a better index of the triboluminescence behavior of the suspended phosphor than will the ratio of the flash intensity to the

UDC: 533.376

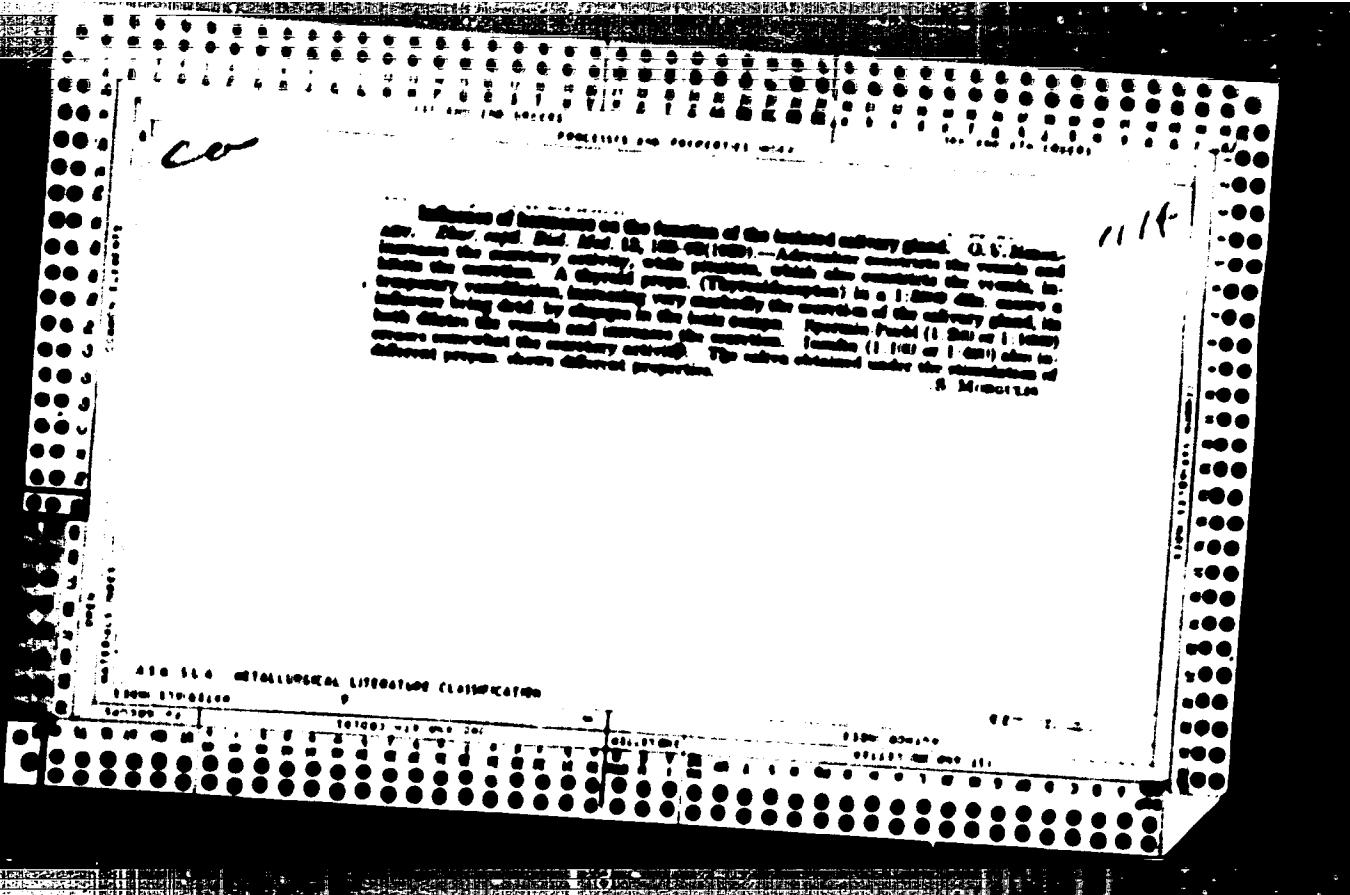
Card 1/2

NIKOLAYEV

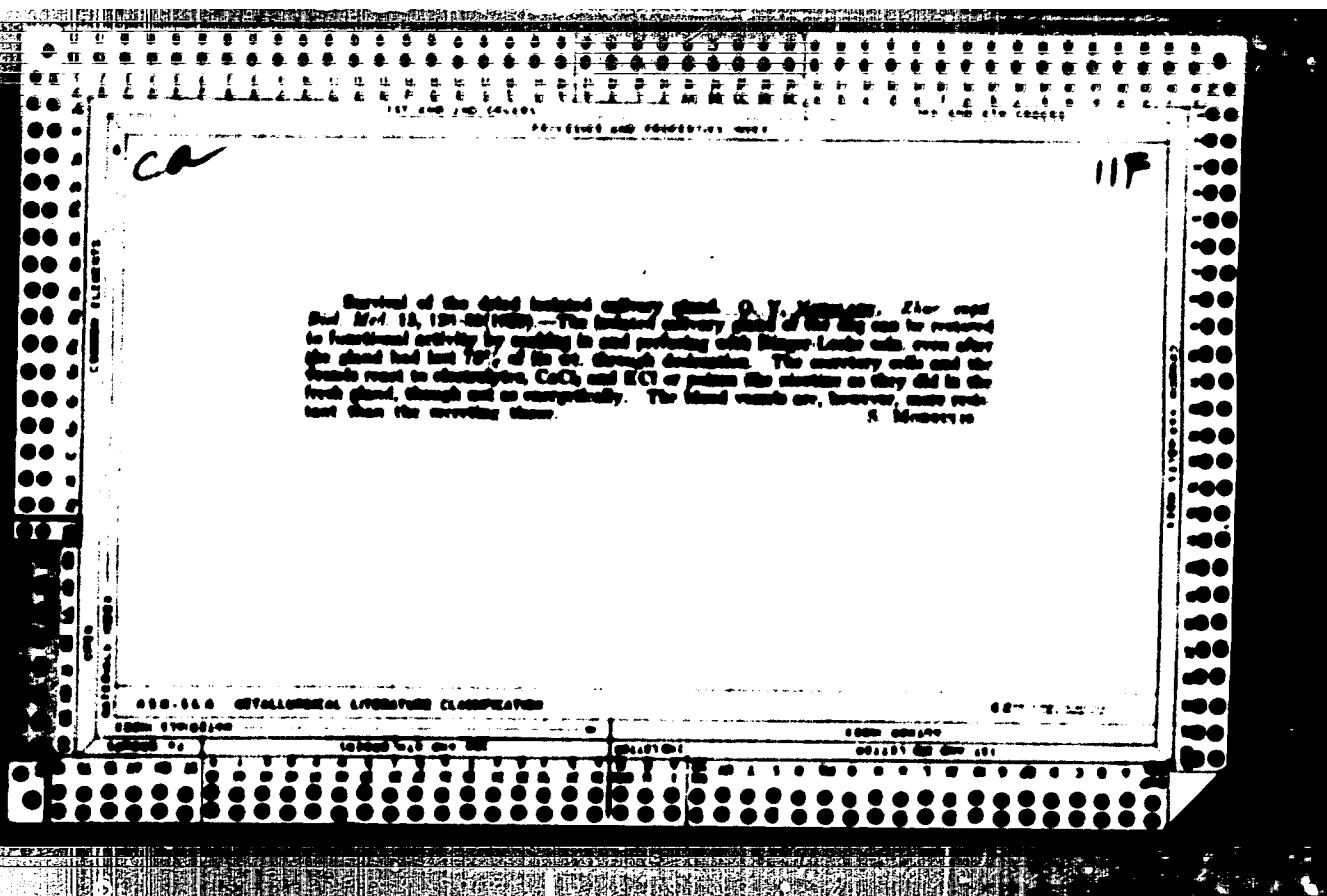
10
112
The role of ions and electrolytes in the process of hormone secretion. O. V.
NIKOLAYEV. Zhurnal fiziol. Russ. Akad. Med. Nauk (1967). The investigation is made
of various types of hormone secretion, particularly concerning the action of acid and
alkali on the secretory function of the pituitary gland.

The role of ions and electrolytes in the process of hormone secretion. O. V.
NIKOLAYEV. Zhurnal fiziol. Russ. Akad. Med. Nauk (1967). The investigation is made
of various types of hormone secretion, particularly concerning the action of acid and
alkali on the secretory function of the pituitary gland.

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takes place in response to nerve stimulation. In the absence of a nerve impulse, on this
view, the alteration of acidic cations within the effector cell should call forth a response.
In experiments on the isolated anterior pituitary glands of the dog this conclusion was realized. It de-
veloped a method for the preparation of the pituitary, gland together with its blood vessels and
nerve supply in such a way that it can be perfused with Ringer-Locke's fluid and thus main-
tained alive for many hrs. At temp. of 37° it is the most favorable, and a section of salivary
glands for 20-30 hrs. The addition of NaCl to the perfusion fluid increases the salivary
secretion while that of MgCl₂ decreases it markedly. Nerve stimulation of the thyroid sym-
pathetic nerve bathes the gland in saline which is greater during perfusion. The thyroid continues to
take its irritability for 3-6 hrs. By increasing the CaCl₂ in the Ringer-Locke's fluid or by
adding CaCl₂ to physical saline (and to a second 10cc of 0.1 M CaCl₂ per 100cc fluid) the
thyroid secretion is increased. Through the addition of MgCl₂ or increasing the NaCl or
KCl content, the secretion becomes absent or even stops altogether. The increase in
CaCl₂ or KCl results in a contraction of the vessels. NaCl causes a dilatation. The
MgCl₂ effect is variable. The secretory effect of the thyroid stimulation may be replaced
by appropriate changes in the basic properties of the perfusing fluid (increased Ca salts) so
that the ions take an important role in the physical environment of tissue. S.M.



The identity of carbon of aluminum and calcium. Dry residue and organic carbon of saliva under the influence of aluminum and calcium. D. V. Krasnianski. Zavod nauchno-tekhnicheskikh issledovaniy po metallovedeniiu i metallicheskoi promstvosti (Bud. Akad. Nauk SSSR). When the activity of each of the selected admixtures is measured by taking the C's content of the sample, it can be performed through the worms, the dry residue of the saliva is diminished. Under the influence of admixtures the dry residue of the saliva becomes greater, however, the 2 factors do not have the same action.



_____, D. V.

Prof., Surgical Div., Clinic Endocrinological Diseases, 111-112-113.

Environmental Endocrinology, -120.1-.

"Surgical Treatment of Basedow's Disease in Children," Mirzaiya, No. 1, 1971:

"Clinical Diagnosis and Surgical Treatment of Diseases of the Thyroid Gland,"

Sov. ed., No. 7, 1972.

NIKOLAYEV, O.V.

33513

Sovremennoye Sostoyaniye Problemy Ciperparatiroosa. Klinich. Meditsina, 1949, No. 10,
c. 6-20

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, Maskva, 1949

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NIKOLAEV, O. V.

NIKOLAEV, O. V.

Progress in treatment of thyrotoxicosis. Klin. med., Moskva 2316,
Aug. 50. p. 28-34

1, Of the Surgical Division (Head—Prof. O. V. Nikolayev), All-
Union Institute of Experimental Endocrinology (Director—Honored
Worker in Science Prof. N. A. Shereshevskiy).

CLNL 19, 5, Nov., 1950

Medicine

Surgery of the endocrine system. Moskva, 1952.

NIKOLAEV, O.

Protection of the sick and wounded in time of war. Sov.kras.krest 4
no.1128-29 Ja-Mr '54. (MILIA 7:4)
(War--Relief of sick and wounded)

NIKOLAYEV, O.V.

[Endemic goiter] Endemicheskii sob. Moscow, Medgiz, 1955. 257 p.
(Goiter) (MLRA 8:11)

NIKOLAEV, O.V. (professor)

Some problems in the pathology and surgery of the thyroid gland.
Probl.endok. i gorm. 1 no.1:33-39 Ja-F '55 (MLBA 8:10)

1. Is khirurgicheskogo otdeleniya (sav.--prof. O.V.Nikolayev)
Vsesoyuznogo instituta eksperimental'noy endokrinologii (dir--
prof. Ye.A.Vasyukova)
(THYROID GLAND, surgery)

NIKOLAEV, O.V., professor (Moskva)

Surgery of diseases of the adrenals. Problemy. i gorm. 2 no. 5:
53-69 8-0 '56. (NLR 9:12)

1. Is khirurgicheskogo otdeleniya kliniki Vsesoyuznogo instituta
eksperimental'noy endokrinologii (dir. - prof. Ye.A.Vasyukova)
(ADRENAL CORTEX, diseases,
surg. (Bm))

NIKOLAYEV, O.V., prof. (Moskva)

Study and control of endemic goiter in the U.S.S.R. Probl.endok.
1 gorm. 3 no.57-61 S-0 '57. (MIRA 11:1)
(GOITER, prevention and control,
endemic, in Russia (Rus))

Москва, СССР.
"Variants of Operations for Tumors of the Suprarenals."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959
(All-Union Institute of Experimental Endocrinology)

From the Surgical Department of the Clinic (Head--Professor O. V. Nikolayev)
of the All-Union Institute of Experimental Endocrinology (Director--Professor
Ye. A. Vasyukova)

NIKOLAEV, O.V., prof.; MELIKOHOVA, Ye.L., nauchnyy sotrudnik

Tumor of the adrenal cortex in a 7-month-old infant. Probl.endok.
1 germ. 5 no.1:94-95 Je-P '59. (NTRA 12:3)

1. Is kliniki Vsesoyuznogo instituta eksperimental'noy endokrinologii
(dir. - prof. Ye.A. Vasylkova).
(ADRENAL CORTEX, neoplasms,
benign tumor in inf. (Bus))

NIKOLAEV, C.V., prof.

Prevention of thyrotoxicosis (Basedow's disease). Zdorov'e 6
no. 11:20-22 N '60. (MIRA 13:10)
(THYROID GLAND—DISEASES)

BAKULEV, A.N., akad.; BLOKHIN, N.N.; BOGUSH, L.K.; VELIKORETSKIY, A.N., prof.; VOZNESENSKIY, V.P., prof., zasl. deyatel' nauki [deceased]; GULYAYEV, A.V., prof.; DANILOV, I.V., prof.; DUBOV, M.D., doktor med. nauk; KAZANSKIY, V.I., prof.; LINBERG, A.A.; LINBERG, B.E., zasl. deyatel' nauki, prof.; MEDVEDEV, I.A., dots.; MESHALKIN, Ye.N., prof.; MIRONOVICH, N.I., doktor med. nauk; NIKOLAEV, O.V., prof.; NIPONTOV, B.V., doktor med. nauk; PETROVSKIY, B.V.; PRIOROV, N.N. [deceased]; RIKHTER, G.A., prof.; ROVNOV, A.S., prof.; RUFANOV, I.G.; STRUCHKOV, V.I.; SHRAYBER, M.I., doktor med. nauk; GORELIK, S.L., dots., red.; YELANSKIY, N.N., red.; SALISHCHEV, V.E., zasl. deyatel' nauki, prof. [deceased]; RYBUSHKIN, I.N., red.; BUL'DYAYEV, N.A., tekhn. red.

[Surgeon's reference book in two volumes] Spravochnik khirurga v dvukh tomakh. Pod obshchim red. A.N. Velikoretskogo i dr. Moskva, Medgiz. Vol. 1. 1961. 564 p. (MIRA 14:12)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Blokhin, Petrovskiy, Priorov, Rufanov, Limberg). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Bogush, Struchkov, Yelanskiy).
(SURGERY)

NIKOLAYEV, O. V., prof.

Principles of preoperative preparation of patients with toxic diffuse goiter. Khirurgia 38 no. 7:92-95 Ju '62.
(MIRA 15:7)

1. Is khirurgicheskogo otdeleniya (sav. - prof. O. V. Nikolayev)
Vsesoyuznogo instituta eksperimental'noy endokrinologii.

(GRAVE'S DISEASE)

NIKOLAEV, O.V. (Noelka)

Current trends in studying the problem of hyperparathyroidism.
Sovr. vop. endok. no.2:188-213 '63. (MIRA 18:?)

NIKOLAYEV, O.V., prof.; BALABOLKIN, M.I.

"Current problems in the hormonal and surgical treatment of diseases of the endocrine glands" by E.Polek, J.Syllaba. Reviewed by O.V.Nikolaev, M.I.Balabolkin. Probl. endokr. gormonoter. 9 no.4:113-116 Jl-Ag'63 (MIRA 17:1)

NIKOLAEV, O.W. [Nikolayev, O.V.]

Current trends in endocrinological surgery in the U.S.S.R.
Polski przegl. chir. 35 no.9 908-910 '63.

1. Kierownik Oddziału Chirurgicznego Kliniki Weterynaryjnego
Instytutu Eksperimentalnej Endokrynologii Ministerstwa Zdrowia
~~WZL~~.

NIKOLAYEV, O.V., prof. (Moskva)

Problems of Surgery on the Endocrinial Glands at the 41st
Congress of Polish Surgeons. Khirurgia 39 no.7s144-149 J1'63
(MIRA 16s12)

NIKOLAYEV, O.V., prof.; KALININ, A.P., kand. med. nauk; VEYNBERG, E.G.

Surgical treatment of hyperinsulinism. Khirurgija 40 no.2:134-
140 P '64. (MIRA 17:7)

1. Khirurgicheskaya otdeleniya (sav. - prof. O.V. Nikolayev)
Vsesoyuznogo instituta eksperimental'noy endokrinologii
(direktor - prof. Ye.A. Vasyukeva), Moscow.

NIKOLAEV, O.V., prof.; KALININ, A.I., kand. med. nauk.

Clinical aspects, diagnosis and surgical treatment of pituitary adenoma. Khirurgija 40 no.7:83-87 (1) '64.

1. Khirurgicheskye otdeleniya (zav. - prof. O.V. Nikolayev). Vsesoyuznogo instituta eksperimental'noy i klinicheskoy khirurgii (dir. - prof. Ye.A. Vasyukova), Moskva.

NIKOLAYEV, O.V., prof. (Moskva)

Surgery on endocrine glands and its problems. Khirurgija 40
no.12:3-5 D '64. (MIRA 18:3)

SOV/124-57-4-4496

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 91 (USSR)

AUTHORS: Nikolayev, P. A., Zhbannikov, P. S.

TITLE: Electroosmotic Phenomena in Ground Water as a Function of Its Composition (Elektroosmoticheskiye yavleniya v gruntovykh vodakh v zavisimosti ot ikh sostava)

PERIODICAL: Tr. Kuybyshevsk. inzh.-stroit. in-t, 1956, Nr 3, pp 173-177

ABSTRACT: The effect of the salts NaCl, MgCl₂, NaHCO₃, Na₂SO₄, and MgSO₄ on the electroosmotic phenomena in sandy soils was investigated. Measurements were carried out in a U-shaped tube partially filled with soil. A constant potential of 120 volts was maintained between the electrodes immersed in an electrolyte. The article does not give any values for the potential of the electric field and the current density in the soil, nor does it provide any data on the distribution of the potential between the soil and the electrolyte. The intensity of the electroosmosis was evaluated from the change in the water level in the tube under the action of a direct current. The electroosmotic effect was most pronounced in NaCl solutions. Some relationship was observed to exist between the above effect and the concentration of the salts. Bibliography: 6 references.

Card 1/1

A. V. N.

USSR/Agriculture - Statistics

Card 1/1 : Pub. 123 - 8/17

Authors : Nikolaev, P. A.; Skalov, G. F.; and Kaplan, R. M.

Title : Using the regulating characteristics of the supply of Diesel engines to establish standards for agricultural work

Periodical : Vest. AN Kac. SSR 11/1, 77-83, Jan 1954

Abstract : An attempt was made to use statistical principles in establishing norms for agricultural production using the figures for tractor supply as one of the operators. Ten Russian references (1943-1/52). Graphs.

Institution : ...

Submitted : ...

NIKOLAY V. P.

Some problems in a machinery system for agriculture in Kazakhstan.
Zemledelie 4 no.8:21-27 Ag '56. (MIRA 10:1)

1. Institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva
Kazakhskogo filiala Vsesoyusnoy Akademii sel'skokhozyaystvennykh
nauk imeni Lenina. (Kazakhstan—Agricultural machinery)

NIKOLAYEV, P. A., CAND TECH SCI, "INVESTIGATION OF THE
PARAMETERS OF SUMMER GRAIN WITH IN-ST HARVESTING UN-
DER THE CONDITIONS OF KAZAKHSTAN." ALMA-ATA, 1959. (KA-
ZAKH ACAD ~~OF~~ AGR SCI. INST OF RURAL MECHANIZATION AND
ELECTRIFICATION ("KIMESKH"). (KL-DV, 11-61, 221).

-171-

Nikolayev, P.A., insh.

Preventing the loss of grain in windrows. Mekh.i elek.sots.
sel'khoz. 17 no.6:7-14 '59. (MIRA 13:4)

1. Kazakhskiy nauchno-issledovatel'skiy institut mekhanizatsii
i elektrifikatsii sel'skogo khozyaystva.
(Grain--Harvesting)

NIKOLAEV, P.A.

Problems in the mechanisation of sheep farming in Kazakhstan.
Zhivotnovodstvo 21 no.4:75-80 Ap '59. (MIRA 12:5)

1. Direktor Kazakhskego nauchno-issledovatel'skogo instituta
mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Kazakhstan--Sheep) (Farm mechanization)

NIKOLAEV, P.A., inzh.

Theoretical principles of designing windrows. Trakt. i sel'khozmasch.
30 no.11:26-29 N '60. (MIRA 13:12)

1. Kasakhskiy nauchno-issledovatel'skiy institut mekhanizatsii
i elektrifikatsii sel'skogo khozyaystva.
(Harvesting machinery)

NIKOLAYEV, P.I.

PHASE I BOOK EXPLOITATION

SOV/4860

Planovskiy, Aleksandr Nikolayevich, and Petr Ivanovich Nikolayev

Protsessy i apparaty khimicheskoy i neftekhimicheskoy tekhnologii (Processes and Apparatus of Chemical and Petrochemical Technology) Moscow, Gostoptekhizdat, 1960. 551 p. 15,000 copies printed.

Reviewer: Kafedra protsessov i apparatov Leningradskogo tekhnologicheskogo instituta imeni Lensoveta and D.I. Orochko, Doctor of Technical Sciences, Professor. Executive Editor: K.P. Kleymenova. Tech. Ed.: I.G. Fedotova.

PURPOSE: This textbook is intended for students in schools of higher education. It may also be used by designers of chemical equipment.

COVERAGE: This is the textbook used in the course "Processes and Apparatus of Chemical Technology" given at chemical machine-building institutes and at chemical technology schools of higher education. The material stresses the kinetics of processes and excludes hydraulics, compressors, and pumps. It incorporates the idea of one kinetic law for chemical and technological processes as advocated by Professor P.G. Romankov. This course is intended

Cane 1/0

- APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001137110017-9"
Processes and Apparatus (Cont.) SOV/4860

to train future designers of chemical equipment with maximum productivity per volume unit with given initial and final parameters for the process, and to determine the basic dimensions of an apparatus and of its principal scheme. The authors thank Professors P.G. Romankov, D.I. Orochko, S. Ya. Ozovskiy, I.G. Martynishin, Yu. V. Poplavskiy, V.N. Kostin, D.S. Artemonov, S.N. Balatov, N.A. Draganova, K.S. Kol'tsov, B.N. Orlov, V.P. Pavlov, B.M. Ustinov, O.S. Chetkov, and G.N. Shmit. There are 91 references: 77 Soviet, 12 English, and 2 German.

TABLE OF CONTENTS:

Foreword

5

GENERAL DATA

Ch. I. General Principles

1. Beginnings and subject of the "Processes and Apparatus" course	5
2. Classification of the basic processes of chemical technology	5
3. Kinetic regularities in the basic processes of chemical technology	6
4. General principles for the design of the chemical apparatus and machinery	9
5. Batch and continuous processes	11
	12

Cane 2/0

NIKOLAYEV, P.I., starshiy nauchnyy sotrudnik

Explosive method in plant dusting. Zashch. rast. ot vred. i bol.
4 no.2:18 Mr-Ap '59. (MIRA 16:5)

(Spraying and dusting equipment)

NIKOLAYEV, Petr Ivanovich, staschiy nauchnyy sotr.; GLIKMAN, N., red.;
ISUPOVA, N., tekhn. red.

[Pests and diseases of grapes] Vrediteli i bolezni vinograda.
Izd. 2., perer. Simferopol', Krymsk, 1961. 146 p.
(MIMA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut vinodeliya i
vinogradarstva "Magarach" (for Nikolayev).
(Grapes—Diseases and pests)

NIKOLAEV, P.I.

Disease-exterminating spraying of vineyards. Zashch. rast. ot vred.
1 bal. 6 no.4:37-38 Ap '61. (MIRA 15:6)
(Grapes—Diseases and pests)
(Spraying and dusting)

NIKOLAYEV, I. I.

Mildew

Effect of low temperatures and moisture in the crown of the vine on the development of mildew. Vin. SSSR. 12, no. 6, 1952.

1952

9. Monthly List of Russian Accessions, Library of Congress, September 1952, Uncl.

ALIAN, Ahmed; RABOTNOVA, I.L.; NIKOLAYEV, F.I.; IVANOV, V.A.

Submerged cultivation of acetic acid bacteria under different
aeration conditions. Mikrobiologiya 32 no.4:703-710 Jl-Ag '63.
(MIRA 17:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo
universiteta imeni M.V. Lomonosova.

AKOPYAN, L.A.; VARYGIN, N.N.; GUTAREV, V.V.; ZINOV, D.D.; KARAVAYEV, N.N.;
KONDRATOV, N.B.; LASTOVITAEV, A.M.; MAZAROV, Yu.I.; MAZIROV, D.Za.;
MARTYUSHIN, I.G.; MASLOVSKIY, M.P.; SHOLAYEV, P.I.; PLANOVSKIY,
A.N.; RICHKOV, A.I. [deceased]; CHERNOV, U.S.; KVAL'NOV, A.N.;
SHARIKOVA, N.A.

Theory and practice of heterogeneous processes in a fluidised
bed. Trudy MIEM 26:3-22 '64. (MIRA 18:5)

NIKOLAYEV, P., starshiy nauchnyy sotrudnik

Preparing a tobacco infusion and extract. (ashch. part. of vred.
i bol. 10 no.7.38-39 '66. (MIRE IP 10.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut vinodeliya i
vinogradarstva "Magarach", Yalta.

SHALAYEV, . N.

Radiosondes

RZN filament batteries made of anode element. Det. i Kidrol. no. 3, 1947.

Monthly List of Russian accessions, Library of Congress, November 1950. Unclassified.

KOTOV, N.P.; NIKOLAEV, P.N.

Radar technique of observing showers and storms. Trudy TMO
no.20:46-57 '58. (WMO 12:1)
(Radar meteorology)

NIKOLAEV, P.N.

Modernization of an indicating device of the storm-warning
radiolocation station. Treaty CCC no.128572-76 '62.

(MIRA 1612)

(Radar meteorology)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001137110017-9

SECRET//NOFORN

HISTORICAL INFORMATION ON THE
CIVIL AND MILITARY DEVELOPMENT OF
THE UNITED STATES IN THE 19TH CENTURY

1. The general trend of development in the United States during the 19th century was:

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001137110017-9"

RABINOVICH, I.B.; NIKOLAEV, P.E.; OCHALIYEV, E.E.; TREP'YAKOVA, N.N.

Isotopic effect on the liquid-vapor equilibrium of binary systems
containing deuterium compounds. Dokl. AN SSSR 110 no.2:241-244
3 '56. (MLRA 9:12)

1. Gor'kovskiy gosudarstvenny universitet imeni N.I. Lobachevskogo.
Predstavлено академиком A.N. Pruskinym.
(Phase rule and equilibrium)
(Deuterium compounds)

copy 26-71-7-3, 15

AUTHORS: Rabinovich, I. B., Kukharyavyy, V. I., Nikolayev, P. N.

TITLE: The Effect of the Substitution of Hydrogen by Deuterium on
the Ultrasonic Velocity, the Refraction and the Viscosity
of Benzene (Vliyanie замены водорода на скорость ультразвука, коэффициент вязкости и

PERIODICAL: Zhurnal fizicheskoy chimii, 1959, Vol. 35, No. 7, pp. 1492-1500
(USSR)

ABSTRACT: The above-mentioned properties were investigated for a deuterium content of 0, 50 and 91 atom % within the temperature interval from 30-60°C. The viscosity of the deuterium benzene had already been investigated by Dixon and Schlesinger (Ref 6), however, only at three temperatures. From the experimental part it may be seen that the deuterium products were obtained from benzene and deuterium sulfuric acid, the latter being produced from SO₂ and heavy water. The deuterium content was determined according to the data supplied by Klit and Langseth (Ref 9) from the density, while the sound velocity was determined according to the method of light diffraction.

Card 1/4

CCU/TM-7-1-45

The Effect of the Substitution of Hydrogen by Deuterium on the Ultrasonic Velocity, the Refraction and the Viscosity of Benzene

The data obtained differ from those obtained by Colling and Raffel (Ref 1). The viscosimeter used is similar to that developed by A. Z. Colling and C. D. Maytham (Ref 11) the flowing-out lasting at least 400 seconds, and the viscosity of the deuterium benzene having been measured relatively to that of benzene. Density was determined in a pycnometer, whereas the index of light refraction was measured by means of a refractometer of the type ~~DP-2~~ (Bulfrich type). In relation to the equation of Schuster (Ref 13) for the ultrasonic velocity based on that of van der Waal, it is assumed that ultrasonic velocities in benzene and its deuterium homologs must be inversely proportional to the magnitudes of the square roots of the molecular weights. In the papers written by Vinscik and Syring (Ref 2) it was shown that the sound velocity in liquids is directly related to the "free volumes". From the equation given by those authors the authors of this paper obtained a 5% enlargement of the free volume in the case of a 50% substitution of the hydrogen by deuterium in benzene, and one of 9% with 91% deuterium; this corresponds to the data obtained in the isotopic effect in compressibility.

Card 2/4

SOV/76-32-7-9/45

The Effect of the Substitution of Hydrogen by Deuterium on the Ultrasonic Velocity, the Refraction and the Viscosity of Benzene

In connection with this it was found that a substitution in benzene of 91 % hydrogen by deuterium decreases the refraction index to 2.10^{-3} and the polarizability to 0,52 %. As the zero energy of the C-L bond is smaller than that of the C-H bond a D \rightarrow H substitution causes an increase of the energy difference between the respective excited and the basic electron level; this fact is explained by observations made by Burton et al. (Ref 15) and is proved by experimental data obtained by Ingold and Wilson (Ref 20). Proceeding from the equation according to Slater and Kirkwood (Ref 21) it is found that a 91 % hydrogen substitution by deuterium causes a decrease of the dispersion energy to 0,4 %; on the other hand it is found according to the data supplied by Wilkinson (Ref 23) that the equations according to London (Ref 24) as well as those according to Slater and Kirkwood (Ref 21) supply similar values for the isotopic effect in the dispersion energy. The observed effects described were explained by the increase in atomic dimensions and by the de-

Card 3/4

RABINOVICH, I.B. (Gor'kyi); Pri uchastii: GOLOV, V.O.; NIKOLAYEV, P.N.;
VOLOKHNOVA, Z.V.; KUCHERYAVYY, V.I.

Effect of substituting deuterium for hydrogen on the velocity of
sound and the compressibility of liquids. Zhur. fiz. khim.
34 no.2:423-431 F '60. (MIRA 14:?)

1. Gor'kovskiy gosudarstvennyy universitet im. N.I.Lobachevskogo,
Institut khimii.
(Deuterium) (Sound--Speed) (Compressibility)

S/081/62/000/010/010/005
B158/B144

AUTHORS: Nikolayev, P. N., Rabinovich, I. T.

TITLE: Thermochemistry of isotopic compounds. I. The effect of substitution of deuterium for hydrogen on the heat capacity of benzene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 44; abstract 103268 (Tr. po khimii i khim. tekhnol., (Gor'kiy), no. 2, 1961, 242-250)

TEXT: The values of c_p of liquid C_6H_6 (I) and C_6D_6 (II) were measured in the temperature range 10-30°C. Values of c_v for these compounds were calculated using data obtained previously on the contractability and coefficient of heat expansion of I and II (RZhKhim, no. 4, 1959, 10921; no. 18, 1960, 76353). Complete substitution of deuterium for hydrogen caused an increase in the c_p value of benzene by 13-14%, and in that of c_v by 18-20%. The ratio of $c_p:c_v$ for I and II was 1.45-1.41 and ✓ ✓

Card 1/2

MEDOLAYEV, P.H.; TIMOFEEV, G.P. (Gor'kiy)

Device for the simultaneous switching-on of stopwatch and current. Zhur.fis.khim. 35 no.8:1860-1861 Ag '61.
(MIRA 14:8)

1. Nauchno-issledovatel'skiy institut khimii pri
Gor'kovskom gosudarstvennom universitete imeni M.I.
Lobachevskogo.

(Automatic timers)

RABINOVICH, I.B.; TEL'NOY, V.I.; NIKOLAEV, P.N.; RAZUVAYEV, G.A.; Prinimala
uchastye: KIRILLOVA, A.S.

Thermochemistry of the interaction between hexamethyldistannane and
benzoyl peroxide. Dokl.AN SSSR 138 no.4:852-855 Je '61.
(KIRA 14:5)

1. Institut khimii pri Gor'kovskom gosudarstvennom universitete imeni
N.I.Lobachevskogo. 2. Chlen-korrespondent AN SSSR (for Razuvayev).
(Tin compounds) (Benzoyl peroxide)

RABINOVICH, I.B.; NIKOLAEV, P.N.

Isotopic effect in the heat capacity of certain deuterium compounds. Dokl. AN SSSR 142 no. 6:1335-1338 F '62.

(MIRA 15:2)

1. Nauchno-issledovatel'skiy inst. tut khimii pri Gor'kovskom gosudarstvennom universitete im. N.I.Lobachevskogo. Predstavlenie akademikom A.N.Frankinym.

(Deuterium compounds--Thermal properties)

DRAGOVTSKIV, A.M., inshener; NIKOLAYEV, P.P., inshener.

New machine for cleaning ballast. Put' i put. khos. no. 7:8-9 Jl
'57. (NIZHNE 10:6)
(Ballast (Railroads))

ВАСИЛИЙ ПЕТРОВИЧ
NIKOLAEV, P.P., inzhener.

The "RU-25" tracklayer. Put: 1 sat.khoz.no.9:32-33 Ag '57.
(HLRA 10-2)
(Railroads--Track)

NIKOLAYEV, P.P., insh.

Heating switches with electricity. Put' i vut.khoz, no.12:11
D '57. (MIRA 10:12)
(Railroads--Switches)

NIKOLAYEV, P.P., invzh.

Mechanisms for workers' rail cars. Put' i pat.khos. 4 no.7:19
Jl '60. (MIRA 13:7)
(Railroad motor cars)

NIKOLATEV, P.V.

Polinomy Masso i ratsional'nye preobrazovaniya nomogram. DAN, 28 (1940), 582-584.
Anamorfoma polinomov. DAN, 28 (1940), 774-778.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

NIKOLAYEV, P.V. Continued

Ratsional'nyye preobrazovaniya nomogramm. M., Uchen. zap. un-ta, 73 (1944), 83-98.
•Polinomy Masso. M., Uchen. zap un-ta, 73 (1944), 99-116.
O edinstvennosti anamorfos uravneniy Masso. M., Uchen. zap. un-ta, 73 (1944), 117-128.
Ob anamorfote simmetricheskikh uravneniy. DAN, 47 (1945), 86-89.
Rational'naya anamorfota uravneniy. DAN, 47 (1945), 159-162.
Anamorfota uravneniy. Matem. sb., 17 (59), (1945), 253-266.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

NIKOLAEV, P. V.

22923 Proektivnosti monogramm n-funktsiy, Doklady Akad. Nauk SSSR, novaya seriya, T. LVII, No 3, 1949, c. 421-23. - Bibliogr: 6 knav.

SO: LETOPIS' NO. 31, 1949

NIKOLAEV, P. V.

PA 375076

"Amorphosis of Polymers," P. V. Nikolayev, Univ. Polytech Inst. S. N. Kirov, Dzerzhovsk, U.S.S.R.
"Tek Ak Nauk SSSR" Vol. LVI, No. 2

Discriminate conditions under which a given real function $\gamma(t_1, t_2, \dots, t_n)$ ($n > 1$) admits of amorphosis, i.e., representation in the form: $\gamma(t_1, t_2, \dots, t_n) = \gamma_1(t_1) + \gamma_2(t_2) + \dots + \gamma_n(t_n)$, and points out effective methods for finding amorphosis in those cases where the dimension (Nikolayev, "Tek Ak Nauk SSSR," Vol. LVI, No. 3,

MECH/CHARACTERISTICS - Amorphous (Contd.)	11 May 49
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$\gamma_1(t_1)$ or $\gamma(t_1, t_2, \dots, t_n)$ is equal to a with respect to at least one of the variables. Published by Acad A. N. Kolmogorov 6 July 49.

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001137110017-9"

"APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001137110017-9

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Nikolayev, P.V.

USSR

Nikolayev, P. V. Binary anamorphoses of functions. Doklady Akad. Nauk SSSR (N.S.) **88**, 209-212 (1953). 1 - r/8

This paper extends the concepts and uses the methods of the author's earlier work [especially same Doklady (N.S.) **67**, 421-423; **68**, 229-232 (1949); these Rev. 12, 406] to study the possibility of representing $F(t, r) = F(t_1, r_1; \dots; t_n, r_n)$ as a binary Massau determinant $|f_{ij}(t_i, r_j); \dots; f_{n1}(t_n, r_1)|$. The conditions obtained are analogous to those previously given. Any two anamorphoses of $F(t, r)$ with the same pairing of variables are projective if the dimension with respect to at least one pair of variables is 4 for $n=4$, or 3 for $n=3$, and in the case $n=4$ if all other dimensions are at least 3. For $n=3$ and homographic orders 3 and 4, by proper choice of the elements of the basic resolution of $F(t, r)$, it can be reduced to one of five canonical forms, analogous to those of Soreau, Cauchy and Clark. They correspond to the sign of the determinant of the anamorphosis matrix.

R. Church (Monterey, Calif.)

Nikolayev, P. V.

Nikolayev, P. V. On binary anamorphosis of N -rational equations. Dokl. Akad. Nauk SSSR (N.S.) 97 (1954), 601-604. (Russian)

Using the terminology and notation of the author's earlier papers [same Dokl. (N.S.) 88 (1953), 207-212; MR 16, 467, and papers there cited] it is here shown that, for $n=3$, if $F(t, \tau)=0$ is nongraphically rational, non-degenerate and of dimension 3 with respect to (t_1, t_2) it admits of a simple anamorphizing factor $y_3(t_1, \tau_1, t_2, \tau_2)$ if and only if the rank of each of its two basic matrices $T^{(1)}$ and $T^{(2)}$ is two. This factor is unique up to within a factor $y_1(t_1, \tau_1)y_2(t_2, \tau_2)$. If F is of dimension 2 with respect to (t_1, t_2) , it admits of an anamorphizing factor of the given form if and only if the auxiliary equation $F(t, \tau)+f(t, \tau)=0$ of dimension 3 does, where the complementary function f is determined by solving a system of linear homogeneous equations. The results are applied to the cases: (a) F real, (b) the τ_i constant, (c) the equations of third to sixth nonographic order discussed in the paper referred to above. The foregoing considerations are all based on the assumption that F has been put in the nongraphically rational form

$$\sum a_m t_1^m t_2^n$$

An algorithm is given for doing this when it is possible and not evident

R. Church (Monterey, Calif.)

NIKOLAEV, P. V.

USER/Mathematics - Binary anamorphosis

Card 1/2 Pub. 22 - 5/45

Authors : Nikolaev, P. V.

Title : Binary anamorphosis permitting a simple λ -multiplier

Periodical : Dok. AN SSSR 103/2, 195-198, Jul 11, 1955

Abstract : A series of theorems is presented for the purpose of establishing conditions under which a nondegenerated equation in the region G ,
 $F(t, \tau) = F(t_1, \tau_1; t_2, \tau_2; t_3, \tau_3) = 0$

permits the existence of the anamorphosis

$$\Phi(t, \tau) = \Psi_3(t, \tau)F(t, \tau) = |f_{11}(t_1, \tau_1); f_{12}(t_1, \tau_1); f_{13}(t_1, \tau_1)|$$

Institution : Ural Polytechnical Institute imeni S. M. Kirov, Sverdlovsk

Presented by : Academician A. N. Kolmogorov, April 7, 1955

Card 2/2 Pub. 22 - 5/45

Periodical : Dok. AN SSSR 103/2, 195-198, Jul 11, 1955

Abstract : with the help of a simple factor A: $\Psi_3(t, \tau) = \Psi_3(t_1, \tau_1; t_2, \tau_2)$.

These theorems also help in determining the elements of the anamorphosis by the rational operations on the particular meanings of the function $P(t, \tau)$. Three references: 1 Germ. and 2 USSR (1914-1954).

REF ID: A6511

SUBJECT USSR/MATHEMATICS/Theory of functions CARD 1/2 PG - 89
 AUTHOR NIKOLAEV P.W.
 TITLE On the closure of nomographic representations of equations.
 PERIODICAL Doklady Akad. Nauk 103, 365-368 (1955)
 reviewed 6/1956

Let $F(t, \tau) = F(t_1, \tau_1; t_2, \tau_2; t_3, \tau_3) = 0$ be an analytic equation in the region G which admits the Λ -multiplicator

$$\Psi(t, \tau) = \Psi_1(t_2, \tau_2; t_3, \tau_3) \cdot \Psi_2(t_3, \tau_3; t_1, \tau_1) \cdot \Psi_3(t_1, \tau_1; t_2, \tau_2)$$

such that for a not identically vanishing analytic function $\Phi(t, \tau)$ there exists the identity

$$\Phi(t, \tau) = \Psi(t, \tau) \cdot F(t, \tau) = |r_{11}(t_1, \tau_1) \cdot r_{12}(t_1, \tau_1) \cdot r_{13}(t_1, \tau_1)|$$

Two functions $\Psi(t, \tau)$ and $\bar{\Psi}(t, \tau)$ being analytic or meromorphic in G are called equivalent if

$$\bar{\Psi}(t, \tau) = \Psi_1(t_1, \tau_1) \cdot \Psi_2(t_2, \tau_2) \cdot \Psi_3(t_3, \tau_3) \cdot \Psi(t, \tau).$$

Now the author proves: If the equation $F(t, \tau) = 0$ is algebraic relative to t_1 , then - except the equivalence - the equations of the binary fields of the

AUTHOR: Nikolayev, P.V. (Sverdlovsk) SOV/39-45-3-4/7

TITLE: On the Projectivity of the Nomographic Representations of Equations (O proyektivnosti nomograficheskikh predstavleniy uravneniy)

PERIODICAL: Matematicheskiy sbornik, 1958, Vol 45, Nr 3, pp 369-396 (USSR)

ABSTRACT: Let G be a domain of the six-dimensional complex space.
Let the equation

$$(1) F(t, \tau) = F(t_1, \tau_1; t_2, \tau_2; t_3, \tau_3) = 0$$

be analytical in G and is supposed to admit there the anamorphosis

$$(2) \Phi(t, \tau) = \Psi(t, \tau) \cdot F(t, \tau) = |f_{11}(t_1, \tau_1); f_{12}(t_1, \tau_1); \\ f_{13}(t_1, \tau_1)|$$

where $\Phi(t, \tau)$, $\Phi \neq 0$ is a function also analytic in G and

$$(3) \Psi(t, \tau) = \Psi_1(t_2, \tau_2; t_3, \tau_3) \cdot \Psi_2(t_3, \tau_3; t_1, \tau_1) \cdot \Psi_3(t_1, \tau_1; t_2, \tau_2)$$

is the A-factor of (1). The author considers the projectivity

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On the Projectivity of the Nomographic Representations
of Equations SOV/32-45-3-4/7

the whole there are proved 22 theorems, conclusions and lemmata;
e.g. the theorem : The transformation (5) transforms each ana-
morphosis of (1) into one of (4) and in inverse manner; from
the projectivity of two anamorphoses of (1) it follows the
projectivity of the corresponding anamorphoses of (4).

Theorem: If the non-algebraicable equation $F(t, \tau) = 0$ admits
non-projective anamorphoses, then the dimension of each of the
equations $\Psi_i = 0$ with respect to each pair (t_k, τ_k) of the

variable is equal to 3.

Theorem: If (1) admits non-projective anamorphoses of the form
 $\Phi(t, \tau) = |f_{11}(t_1, \tau_1); f_{12}(t_1, \tau_1); f_{13}(t_1, \tau_1)|$, then all
binary fields of the variable (t_1, τ_1) degenerate into binary
scales on algebraic curves; the sum of the orders of the dif-
ferent curves in every anamorphosis is equal to 3.
In the paper the author essentially uses the notions and re-
sults of former investigations of the author [Ref 2,3,4,6].

There are 10 references, 4 of which are Soviet, 3 French,

Card 3/4

AUTHOR: Nikolayev, P.V. 20-119-1-7/52

TITLE: On the Uniqueness of Homographic Representations of Equations
(O jedinstvennosti nomograficheskikh predstavleniy uravneniy)

PERIODICAL: Doklady Akademii Nauk, 1958, Vol 119, Nr 1, pp 31-34 (USSR)

ABSTRACT: If the analytic, non-degenerated equation

$$(1) \quad F(t, \tau) = F(t_1, \tau_1; t_2, \tau_2; t_3, \tau_3) = 0$$

does not admit projective anamorphoses of the form

$$\Phi(t, \tau) = \Psi(t, \tau) \cdot F(t, \tau) - [f_{11}(t_1, \tau_1); f_{12}(t_1, \tau_1); f_{13}(t_1, \tau_1)],$$

then all binary fields (t_1, τ_1) degenerate into binary scalar on algebraic curves; the sum of the orders of different curves in every anamorphosis is three. If such an equation in at least one variable is algebraizable, then it is similar to an equation of third N-order and therewith it admits anamorphoses of all three genera; in its nomograms of third genus as a common base there serves a unicursal curve of third order. If (1) is not algebraizable, then it admits only nomograms of third genus with a common base on an elliptic curve of third order.

Card 1/2

NIKOLAYEV, P.V.

From : NIKOLAYEV
BRY, 2660

To : V. A. Steklov Mathematical Institute, Moscow, 1956
Subject: Mathematical publications. Collection
of papers presented at the 3rd All-Union Mathe-
matical Conference in Moscow, vol. 1, Summary of Scientific Reports.
Moscow, 1959. 240 pp. 8vo. 1959.
pp. 62-63 copies printed.

Language: Russian
Title: Summary of Scientific Reports of the 3rd All-
Union Mathematical Conference, held in Moscow, July 1956.

Author: V. A. Steklov Mathematical Institute, V. G. Arsen'ev, V. G. Belyaev, V. V. Borodin, A. D. Bryants, S. B. Grankin, A. G. Kostyuk, Yu. V. Prokhorov, S. A. Solntsev, V. A. Steklov, V. A. Tikhonov, V. A. Vinogradov, G. Ya. Yosifov, and A. I. Zaslavskii.

This note is intended for mathematics and statistics.

This note is a summary of the Proceedings of the Third All-
Union Mathematical Conference, held in Moscow, July 1956. The
Conference was divided into two main parts. The first part contains the sum-
maries of papers presented by Soviet scientists at the Con-
ference. These summaries are included in the first two volumes. The
second part contains the lists of reports submitted to the editor
and the names of the authors. In those cases when the summaries did
not contain the names of the authors, the editor has added a copy of his paper to the editor. The title
of the paper is given in the appropriate volume. The papers
are arranged in chronological order. Various topics in number theory,
differential and integral equations, function theory,
functional analysis, probability theory, topology, mathematical
physics, and applied mathematics, and the foundations of mathematics, and the
history of mathematics.

77	Chernikov, S. M. (Generalized). Generalization of the theory of functions of multidimensional do- mains.
78	Chernikov, S. M. (Generalized). Study analysis of analytic functions of several variables.
79	Chernikov, S. M. (Generalized). A detailed study of some anal-
80	Chernikov, S. M. (Generalized). Transformation of a certain variable in a mapping projective type.
81	Chernikov, S. M. (Generalized). On the theory of surfaces in multidimensional space.
82	Chernikov, S. M. (Generalized). On the foundations of mathematics and the foundations of mathematics.
83	Chernikov, S. M. (Generalized). On the subjects of mathematics

June 16/59

NIKOLAYEV, P.V.

Solving systems for equations with anamorphosis. Izv.vys.ucheb.sav.;
mat. no.1:145-155 '59. (MIR 12:2)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.
(Equations)

NIKOLAEV, P.V.

Anamorphic properties of equations admitting the A factor.
Inv.vys.usheb.sov.; mat. no.2:167-175 '59. (NIM 12:5)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.
(Equations, Theory of)